

The U.S.-Japan Workshop on “The Co-Benefits of Climate Actions in Asia”

Summary

Introduction

On 22 April 2008, the Institute for Global Environmental Strategies (IGES), the Ministry of the Environment, Japan (MoEJ), and the United States Environmental Protection Agency (USEPA) organized a workshop entitled “The Co-Benefits of Climate Actions in Asia” at the United Nations Convention Center in Bangkok, Thailand. The meeting’s main goal was to assess the opportunities for and obstacles to enhancing the policy impacts of co-benefits in Asia. In line with that goal, the meeting was designed to achieve three objectives:

- discuss the status of various initiatives on co-benefits in Asia;
- identify transportation policies with significant co-benefits as well as barriers to realizing those benefits; and
- examine opportunities for recognizing and rewarding co-benefits in the post-2012 climate change regime.

The workshop featured 15 presentations and a dialogue with 45 stakeholders from across the Asia-Pacific region.

Opening Session: Objectives and Scope of the Meeting

Dr. Ancha Srinivasan, Principal Researcher and Manager, Climate Policy Project, IGES, opened the meeting by reviewing its scope and objectives. He noted that while many studies have demonstrated that co-benefits can offset the costs of climate actions, the policy impacts of these studies have thus far been limited in Asia. The meeting will therefore explore ways to increase the likelihood of integrating co-benefit estimates into policies. After reviewing the history of the U.S.-Japan Co-benefits Workshop and research on co-benefits at IGES, Dr. Srinivasan presented the workshop’s key questions. The questions focused on the status of co-benefits in Asia; the reasons that transportation policies with co-benefits have/have not been adopted or implemented effectively; and the institutional arrangements needed to recognize and reward co-benefits in the post-2012 climate regime.

Panel 1: Co-benefits Projects in Asia

Mr. Jack Fitzgerald, Project Manager, Integrated Environmental Strategies (IES), USEPA, provided an overview of the history and goals of the USEPA’s IES program. IES was founded in 1998 to strengthen the capacity of developing countries to analyze the co-benefits of integrated policies. Over the past decade, the program has worked with local

partners in eight countries (four in Asia – China, India, Republic of Korea and the Philippines). After reviewing results from IES projects in India and China, Mr. Fitzgerald discussed the reasons the program has experienced some success influencing policy. He emphasized the importance of having reasonable expectations, since co-benefit estimates are just one of many considerations in the policymaking process. He further highlighted the importance of working with the right partners, involving key stakeholders, making analyses consistent with in-country realities, and presenting accurate cost information.

Ms. Akiko Nakagawa, Deputy Director, Office of International Strategy on Climate Change, MoEJ, described some of the Japanese government's recent initiatives to promote co-benefits in Asia. She noted that Japan became increasingly interested in co-benefits following the launch of Japan's Cool Earth 50 initiative in May 2007. As part of Cool Earth 50, in January 2008 Japan announced the creation of a financial mechanism to assist developing countries employing a co-benefit approach. Much of the assistance will come from Official Development Assistance (ODA) loans with special concessionary terms. Ms. Nakagawa also indicated that, because MoEJ has been entrusted to review ODA commitments relevant to climate change, it is now in a better position to ensure that climate concerns are addressed in Japan's development policy and project lending.

Mr. Cornie Huizenga, Executive Director, Clean Air Initiative for Asian Cities (CAI-Asia), observed that the rationale for taking a co-benefit approach is growing stronger inside and outside Asia. He nevertheless lamented that thus far co-benefits remains more of an aspirational goal than an operational concept. One way to make it more operational would be to target Asia's more than 2,500 cities with populations greater than 100,000. Another suggestion for operationalizing co-benefits involves appreciating cross-national differences in regulatory frameworks. In Asia, many of the policies that could deliver co-benefits have yet to be developed, requiring a different approach than countries with more mature regulatory frameworks. Mr. Huizenga concluded by discussing other policy, financial, institutional, and technological challenges to realizing co-benefits in Asia.

Mr. Masakazu Ichimura, Chief, Environment Section, United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP), provided an overview of UNESCAP's activities. Many of UNESCAP's efforts to promote co-benefit were being channelled through the "Kitakyushu Initiative for a Clean Environment," a programme that promotes sustainable practices in Asia's cities. He then remarked that the most promising way to promote green growth was to recognize both environmental co-benefits (such as improved air quality) and socio-economic co-benefits (such as poverty alleviation). Explicitly demonstrating both sets of co-benefits can make climate change a greater priority in local policy decisions, improve coordination between government agencies, attract financial assistance, and strengthen political support.

Panel 2: The Co-benefits of Transportation Policies in Asia

Dr. Shobakhar Dhakal, Executive Director, Global Carbon Project (GCP), National Institute for Environmental Studies (NIES), began by noting that the transportation sector is a growing source of GHG emissions in Asia. He then suggested there exists several

upstream (mobility and clean transport system) and downstream (clean fuels and vehicles) strategies to capture climate and developmental benefits. Dr. Dhakal argued, however, that not all of strategies deliver both climate and development benefits (for instance, shifting from gas to diesel can increase urban air pollution). Researchers therefore should pay close attention to whether transportation policies create synergies or conflicts between climate and development goals. He also cautioned that many of the current co-benefit analyses in Asia have been shallow post-hoc studies rather more sophisticated analyses of mitigation scenarios. Dr. Dhakhal further argued for more serious engagement with decision makers in co-benefits projects and more on-the-ground champions for co-benefits.

Dr. Heru Sutomo, Director, The Centre for Transportation Studies (PUSTRAL), Universitas Gadjah Mada; Dr. Jane Romero, Policy Researcher, IGES; and Dr. Eric Zusman, Policy Researcher, IGES made a presentation analyzing the co-benefits analysis of a bus rapid transit (BRT) system in Jakarta, Indonesia. Dr. Zusman began by demonstrating that bus programs can deliver significant co-benefits. Dr. Sutomo then provided a review of the potential benefits and barriers to realizing those benefits from Jakarta's BRT programme. Benefits included reductions in commuting times and fuel savings. Barriers included institutional, infrastructure, operational, technical, and financial issues (that have become more significant as the BRT was extended from 1 to 7 lines). Dr. Romero concluded with estimates of direct and indirect co-benefits (fuel savings, time savings, and GHG reductions) from the Jakarta BRT as well as projections of the differences in estimated benefits under scenarios with and without barriers.

Dr. Alberto Ayala, Chief, Climate Change Mitigation and Emissions Branch, California Air Resources Board (CARB), suggested that California has had a long history of environmental policy leadership in the United States and is once again leading on GHG mitigation. The most recent indication of that leadership is Assembly Bill 32 (AB 32), which calls for measures to return California's GHG emissions to 1990 levels by 2020. These actions are expected to establish a path for reducing emissions by 80 percent of 1990 levels by 2050 (as called for by Governor Schwarzenegger in 2005 under Executive Order). AB 32's targets will be achieved through a combination of regulatory and non-regulatory strategies (including voluntary actions, direct emission reduction measures, alternative compliance mechanisms, market mechanisms, and incentives). An early action plan developed last year identified near-term discrete options for GHG emission reductions. The AB 32 scoping plan or overall framework of policy options for achieving the maximum technologically feasible and cost-effective reductions of GHG emissions by 2020 is expected later this year. The scoping plan includes an evaluation of the potential economic, environmental, and health benefits of California's proposed mitigation measures. Many of the transportation measures in California's climate strategy are therefore likely to generate co-benefits related to air pollution reductions. These measures may also result in reductions in particulate matter (PM) and its components including black carbon, which is a net climate warmer and has a high greenhouse warming potential (GWP).

Dr. K.V. Ramani, Chief Environmental Scientist, Andhra Pradesh Pollution Control Board (APPCB), reviewed the general trends behind increasing transport emissions in India. After providing this overview, she turned to Hyderabad's co-benefits project and its contribution to an important apportionment study. The information from the apportionment study was then used to formulate an action plan with several air pollution abatement initiatives (for vehicles, fuels, infrastructure, and traffic management). Dr. Ramani nevertheless observed that there were significant barriers to moving from the formulation of the action plan to the implementation of its proposed initiatives. Some of these barriers appeared in the form of socio-political opposition from affected interest groups. Other included the lack of political will to push through potentially controversial measures. The absence of accurate cost information and the difficulties in harmonizing different sources of data were yet other obstacles to realizing estimated benefits in Hyderabad.

Mr. Michael Walsh, Chairman of the Board of Directors, International Council on Clean Transportation (ICCT), suggested that vehicles have been responsible for increases in fuel consumption, urban air pollution, and GHG emissions. He noted that there are three types of interventions that can simultaneously address these problems: 1) using low emissions, fuel efficient cars; 2) switching to low carbon fuels; and 3) reducing vehicle miles travelled through traffic demand management or public transport improvements. Mr. Walsh also suggested that it is important to pay attention to how these measures are designed before assuming they will capture all relevant benefits. For instance, China and India's shift to diesel has been accompanied by lenient nitrous oxides (NO_x) and particulate matter (PM) standards. Mr. Walsh concluded by reflecting upon the institutional coordination issues that—with the notable exception of Thailand—frequently undermine designing and implementing integrated transportation measures in Asia.

Panel Discussion: Recognizing and Rewarding Co-benefits in the Post-2012 Climate Regime

Dr. Hu Tao, Policy Research Center, Ministry of Environmental Protection (MEP), China and the University of Oregon, USA, noted that research on co-benefits has influenced several policies in China, including sulphur dioxide and carbon intensity targets in the 11th five-year plan. While this is an encouraging trend, horizontal and vertical coordination problems and regulatory instrument choice issues continue to frustrate China's attainment of co-benefits. Dr. Hu expressed doubts that reforming post-2012 climate along the lines of SD-PAMs could help overcome these obstacles. He instead supported shifting the basis for the post-2012 regime from the currently inequitable "grandfathering" principle to a more equitable "grandmothering" principle. Such a shift would entail allocating each person an equal carbon allowance and then permitting trading of these allowances. Dr. Hu argued this would lead to a fairer and more efficient post-2012 regime.

Ms. Jan Corfee-Morlot, Senior Advisor, Organization of Economic Cooperation and Development (OECD), began with a review of work on co-benefits at the OECD. She

then noted that many sectors offer co-benefits, and realizing them will require the use of multiple “windows” (both climate actions and other pollution control measures) to assess co-benefits. She also reflected upon whether the reforms to post-2012 climate regime (such as SD-PAMs) could support the recognition of co-benefits. While there is a growing interest in these post-2012 reforms, questions remain concerning monitoring rules, eligibility, and international crediting. She concluded that a CDM-like mechanism would be needed to promote co-benefits but it would have to be designed differently than the current project-based CDM.

Kentaro Tamura, United Nations Environment Program (UNEP) Regional Resource Centre for Asia and the Pacific (RRCAP), addressed two questions: why the current regime has had little success promoting sustainable development; and what is the political feasibility of introducing a development-friendly proposal such as SD-PAMs. For the first question, Dr. Tamura noted that both the UNFCCC and Kyoto Protocol take a “climate” not a “development-first” approach and the lack of rewards for developmental benefits in the CDM. For the second question, Dr. Tamura argued that the feasibility of development-friendly proposals would depend upon the fit between the post-2012 regime architecture and domestic institutions as well as the kind of incentives for countries to participate in such a regime.

Eric Zusman, Policy Researcher, IGES, noted that the current regime and its CDM offered little support for developmental objectives. He contended that lack of attention to development could be addressed with a post-2012 regime that recognized and rewarded co-benefits. Designing such a regime, however, will require greater consideration of institutional costs of operating a development friendly post-2012 regime. He concluded that much of the current research on co-benefits—for instance, compiling key data inputs (Value of a Statistical Life) from the IES programme—could help reduce these institutional costs.

Following the above remarks, workshop participants raised several questions. Some of the questions focused on whether the post-2012 climate regime was the right place to reward co-benefits. Others questions focused on the institutional steps to move from generating co-benefit estimates to recognizing co-benefits. Many of the comments referred to the current flaws with and potential reforms to the CDM. For instance, some participants noted the need to develop two separate CDM-like mechanisms, one similar to the current project-based CDM (that would have a limited impact on development) and another scaled-up CDM (to address development issues). Some participants suggested linkages between existing initiatives such as the “International Council for Local Environmental Initiatives” (ICLEI) and the international climate regime.

Key Messages

- There is a growing interest in both generating estimates on co-benefits and determining how such estimates can be made more useful to policymakers in Asia. Several organizations have launched initiatives to raise awareness of co-benefits.

- Future projects on co-benefits should pay attention to on-the-ground realities, include environmental as well as socio-economic benefits, and present cost information along with benefit estimates.
- Differences exist over whether co-benefits projects should focus their efforts at the national or sub-national level, use more or less sophisticated estimation tools, and supply only capacity-building or a broader range of incentives to support the uptake of policies with co-benefits.
- Several transportation policies (ranging from fuel switching to land use measures) can deliver both GHG reductions and developmental benefits. There are nevertheless many barriers to realizing co-benefits, which are evident especially during the design of integrated transportation measures. In Asia, the shift to diesel fuels and vehicles is an area where it is difficult to capture both climate and developmental benefits. These obstacles, however, can be overcome with careful consideration of complementarities between fuel and vehicle standards (Hong Kong).
- Technical and institutional barriers are particularly evident during the implementation of integrated transportation policies. The institutional difficulties (especially interagency coordination problems) appear more difficult though not impossible to overcome than the above design issues (Thailand).
- The current climate change regime has paid insufficient attention to sustainable development and the post-2012 regime should offer greater support for national development goals.
- Both the architecture of the climate regime and national institutions must be strengthened to realize co-benefits. Reforming the current CDM to make it more developmental friendly and tightening its linkages with existing development policies appears promising. Doing so will nevertheless require a greater appreciation for the trade-offs between the institutional costs of operating a reformed CDM and the developmental benefits a modified CDM is expected to deliver.

Conclusion

There was a consensus on the need for a greater understanding of how estimates on co-benefits are integrated into policies in Asia. While the estimates of these benefits have already had a modest impact on policies, these impacts are more evident in the design than the implementation of policies. There was also a general agreement that while research and projects can generate increasingly sophisticated estimates, many of the problems that frustrate their realization have little to do with estimation. They instead involve finding an appropriate interface between estimates and existing institutional arrangements. The meeting ended with a desire to plan future collaborations between IGES and other organizations conducting research related to co-benefits.